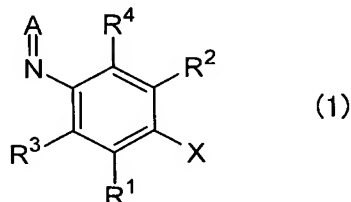


What is claimed is:

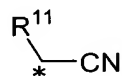
1. A hair dye composition comprising a dissociative direct dye represented by the following formula (1):



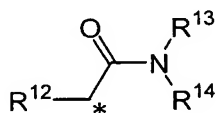
wherein, R^1 , R^2 , R^3 and R^4 each independently represents a hydrogen atom or a substituent, X represents a hydroxyl group or $-NH\text{SO}_2R^5$, in which R^5 represents an alkyl, aryl or heterocyclic group, A represents a group represented by any one of the below-described formulas (Cp-1) through (Cp-12)

which group may have one or more substituents:

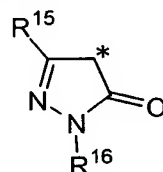
(Cp-1)



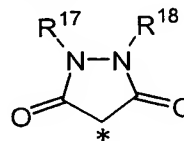
(Cp-2)



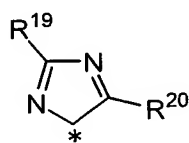
(Cp-3)



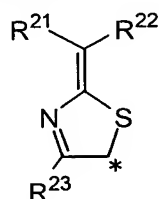
(Cp-4)



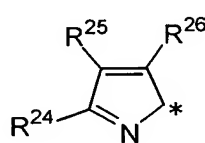
(Cp-5)



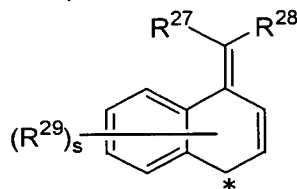
(Cp-6)



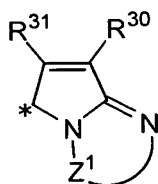
(Cp-7)



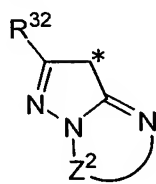
(Cp-8)



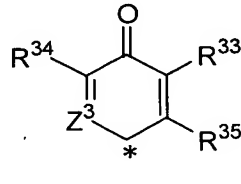
(Cp-9)



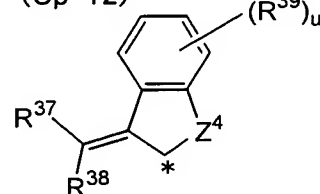
(Cp-10)



(Cp-11)



(Cp-12)



(in formulas (Cp-1) through (Cp-12), * is a position

bonding to the nitrogen atom in formula (1),

in formula (Cp-1), R^{11} represents a cyano, acyl, aryl or heterocyclic group, or $-C(R^{101})=C(R^{102})-R^{103}$, in which R^{101} , R^{102} and R^{103} each independently represents a hydrogen atom or a substituent with the proviso that at least one of R^{102} and R^{103} is an electron attractive group having a Hammett σ_p value of 0.1 or greater,

in formula (Cp-2), R^{12} represents a cyano, alkoxy carbonyl, carbamoyl, aryl or heterocyclic group, and R^{13} and R^{14} each independently represents a hydrogen atom or an alkyl, aryl or heterocyclic group,

in formula (Cp-3), R^{15} represents a hydrogen atom or an alkyl, aryl, heterocyclic, amino, alkylamino, arylamino, heterocyclic amino, alkoxy, acylamino, alkoxy carbonylamino, ureido, alkoxy carbonyl, carbamoyl or cyano group, and R^{16} represents a hydrogen atom or an alkyl, aryl or heterocyclic group,

in formula (Cp-4), R^{17} and R^{18} each independently represents a hydrogen atom or an alkyl, aryl or heterocyclic group,

in formula (Cp-5), R^{19} and R^{20} each independently represents a hydrogen atom or an alkyl, aryl or heterocyclic group,

in formula (Cp-6), R^{21} and R^{22} each independently represents a cyano, carbamoyl, alkoxy carbonyl,

alkylsulfonyl or arylsulfonyl group, and R^{23} represents a hydrogen atom or an alkyl, aryl or heterocyclic group,

in formula (Cp-7), R^{24} , R^{25} and R^{26} each independently represents a hydrogen atom or a substituent,

5 in formula (Cp-8), R^{27} and R^{28} each independently represents a cyano, carbamoyl, alkoxycarbonyl, alkylsulfonyl or arylsulfonyl group, R^{29} represents a substituent, and s stands for an integer of from 0 to 6,

10 in formula (Cp-9), R^{30} and R^{31} each independently represents a hydrogen atom or a substituent, and Z^1 represents an atomic group necessary for the formation of a 6-membered ring together with $N-C=N$,

15 in formula (Cp-10), R^{32} represents a hydrogen atom or a substituent, and Z^2 represents an atomic group necessary for the formation of a 6-membered ring together with $N-C=N$,

20 in formula (Cp-11), R^{33} , R^{34} and R^{35} each independently represents a hydrogen atom or a substituent, Z^3 represents a nitrogen atom or $-C(R^{36})=$, in which R^{36} represents a hydrogen atom or a substituent, with the proviso that when Z^3 represents $-C(R^{36})=$, R^{34} and R^{36} may be coupled to form a 5-membered or 6-membered ring, and

25 in formula (Cp-12), R^{37} and R^{38} each independently represents a cyano, carbamoyl, alkoxycarbonyl, alkylsulfonyl or arylsulfonyl group, R^{39} represents a hydrogen atom or a substituent, u stands for an integer of

from 0 to 4 and Z^4 represents $-SO_2-$ or $-SO-$), or salt thereof.

2. A hair dye composition of Claim 1, wherein R^1 and R^2 of the dissociative direct dye (1) are each a hydrogen or halogen atom, or an alkyl, cyano, acylamino, ureido, alkoxy-carbonylamino, aryloxy-carbonylamino, sulfamoylamino, alkylsulfonylamino, arylsulfonylamino, alkoxy-carbonyl, sulfamoyl or carbamoyl group which may be substituted.

3. A hair dye composition of Claim 1, wherein R^3 and R^4 of the dissociative direct dye (1) are each a hydrogen atom, a halogen atom, or an alkyl or acylamino group which may be substituted.

4. A hair dye composition of Claim 1, wherein X of the dissociative direct dye (1) is a hydroxyl group or $-NHSO_2R^5$, and R^5 is an alkyl group which may be substituted.

5. A hair dye composition of Claim 1, wherein A of the dissociative direct dye (1) is a group, which may have one or more substituents, selected from the groups represented by:

formula (Cp-1) in which R^{11} is a cyano group, acyl group, heterocyclic group or group $-C(R^{101})=C(R^{102})-R^{103}$,

formula (Cp-2) in which R^{12} is a cyano group, aryl group or heterocyclic group and R^{13} and R^{14} are each a hydrogen atom, alkyl group or aryl group, with the proviso that at least one of R^{13} and R^{14} represents a hydrogen atom,

formula (Cp-3) in which R^{15} is an alkyl, amino, alkylamino, arylamino, heterocyclic amino, alkoxy, acylamino, alkoxy-carbonylamino, ureido, alkoxy-carbonyl, carbamoyl or cyano group, and R^{16} is an aryl or
5 heterocyclic group,

formula (Cp-4) in which R^{17} and R^{18} are each an alkyl or aryl group,

formula (Cp-5) in which R^{19} and R^{20} are each an aryl or heterocyclic group,

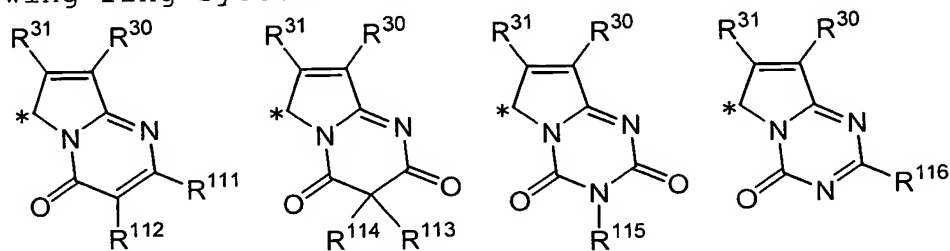
10 formula (Cp-6) in which R^{21} and R^{22} are each a cyano, carbamoyl or alkoxy-carbonyl and R^{23} is a hydrogen atom or an alkyl group,

formula (Cp-7) in which R^{24} is a hydrogen atom or an aryl, acylamino, alkylsulfonylamino or arylsulfonylamino
15 group and R^{25} and R^{26} are each a hydrogen atom or an aryl, alkoxy-carbonyl, carbamoyl, alkylsulfonyl, arylsulfonyl or cyano group,

formula (Cp-8) in which R^{27} and R^{28} are each a cyano, carbamoyl or alkoxy-carbonyl group, R^{29} is a halogen atom or
20 an acylamino, alkylsulfonylamino, arylsulfonylamino, alkoxy-carbonyl, carbamoyl, alkylsulfonyl or arylsulfonyl group, and s is an integer of from 0 to 2,

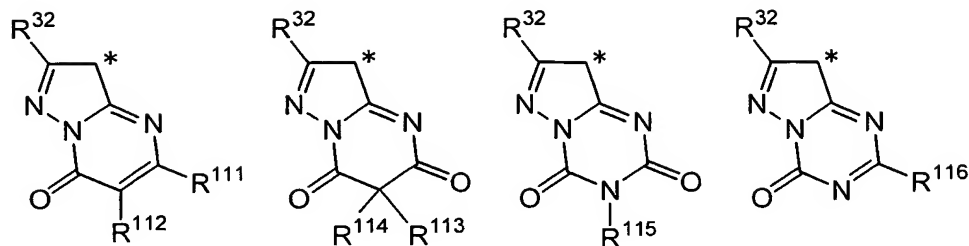
formula (Cp-9) in which R^{30} and R^{31} are each a hydrogen atom or an alkyl, aryl, heterocyclic,
25 alkoxy-carbonyl, carbamoyl, alkylsulfonyl, arylsulfonyl or

cyano group and Z^1 is a group capable of forming the following ring systems:



in which, R^{111} represents a hydrogen atom or an alkoxy, amino, alkylamino, arylamino, heterocyclic amino, acylamino, ureido, alkoxycarbonylamino, aryloxycarbonylamino, sulfamoylamino, alkylsulfonylamino, arylsulfonylamino, alkylthio, arylthio or heterocyclic thio group, R^{112} represents a hydrogen or halogen atom, or an alkyl, acyl, carbamoyl or alkoxycarbonyl group, R^{113} and R^{114} each independently represents a hydrogen atom or an alkyl group, R^{115} represents a hydrogen atom or an alkyl group, and R^{116} represents a hydrogen atom or an alkyl, aryl, alkoxy, aryloxy, amino, alkylamino, arylamino, heterocyclic amino, acylamino, ureido, alkoxycarbonylamino, alkylsulfonylamino, arylsulfonylamino, alkylthio, or arylthio group,

formula (Cp-10) in which R^{32} is a hydrogen atom or an alkyl, aryl, heterocyclic, alkoxycarbonyl, carbamoyl, alkylsulfonyl, arylsulfonyl or cyano group, and Z^2 is a group capable of forming the following ring systems:



in which, R^{111} to R^{116} have the same meanings as described above,

formula (Cp-11) in which Z^3 is $-C(R^{36})=$, R^{36}

5 representing a hydrogen atom or an acylamino group, R^{33} and R^{34} are each a hydrogen atom, a halogen atom, an alkyl group or acylamino group, and R^{35} is a hydrogen atom or an alkyl group; or in which Z^3 is $-C(R^{36})=$, R^{34} and R^{36} are coupled together to form a benzene ring which may be substituted with a halogen atom or an amino, alkylamino, arylamino, heterocyclic amino, acylamino, ureido, alkoxy-carbonylamino, alkylsulfonylamino or

10 arylsulfonylamino group, R^{33} represents an acylamino, alkylsulfonylamino, arylsulfonylamino, carbamoyl or sulfamoyl group, and R^{35} represents a hydrogen atom, and

15

formula (Cp-12) in which R^{37} and R^{38} are a cyano or alkoxy-carbonyl group, R^{39} is a halogen atom or an acylamino, alkylsulfonylamino, arylsulfonylamino, alkoxy-carbonyl, carbamoyl, alkylsulfonyl or arylsulfonyl group, u is an

20 integer of from 0 to 2, and Z^4 is $-SO_2-$.

6. A hair dye composition of Claim 1, wherein A of the dissociative direct dye (1) is a group represented by

formula (Cp-1), (Cp-2), (Cp-3), (Cp-4), (Cp-7), (Cp-9) or (Cp-11).